Gradient boosting (feature importance)

After the boosted trees are constructed, we can build an importance score for each attribute. That score indicates how valuable each feature was in the fitting process.

In this case, the feature importance is

Library	Description
Ambient temperature	.90
Exhaust Vacuum	.06
Ambient Preassure	.015
Relative Humidity	.013

Gradient boosting (Interpretation)

We can extract the log-odds contribution of each feature in a prediction by adding up the contributions of each one of them for every tree in the ensemble.

In that way, we can measure the impact that each feature had in a prediction: